



Data Sheet
1842.5MHz SAW 3030
SPT1842M3030A

V1.0

Description:

The Spectron SPT1842M3030A is a SAW filter that work frequency ranges from 1805 to 1880MHz. It is designed for applications in RF module, IOT equipments and Information & Communications filed.

The SPT1842M3030A provides +20dBm power handling, low insertion loss and high out of band rejection.

The design and manufacturing of the SPT1842M3030A exploit Spectron's exclusive TSAW technology to deliver competitive performance against state of the art at a low cost.

The SPT1842M3030A is compatible with high volume, lead-free SMT soldering processes.

Features:

- Single-Ended Input and Output
- Terminating Impedance: 50 Ω
- Environmental
 - RoHS Compliant

Specifications:

- Operation Temperature: -40°C to +85°C
- Usable passband 75MHz
- Compact miniature size
 - 3.0 mm \times 3.0 mm footprint
 - 1.25 mm max-height

Applications:

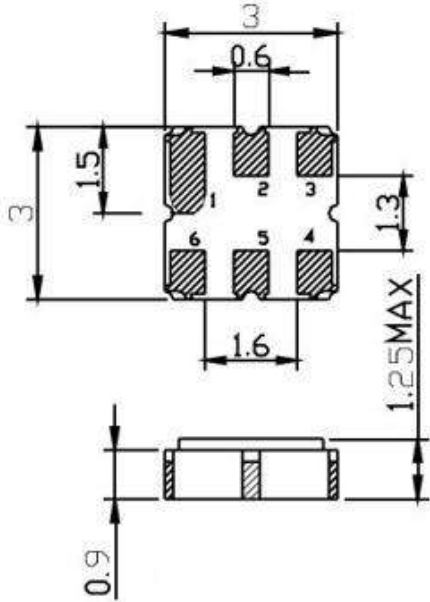
- RF module
- IOT equipments
- Information & Communications Devices

Electrical Specifications**Table 1** Electrical Specifications.

Test Temperature: 25°C±2°C

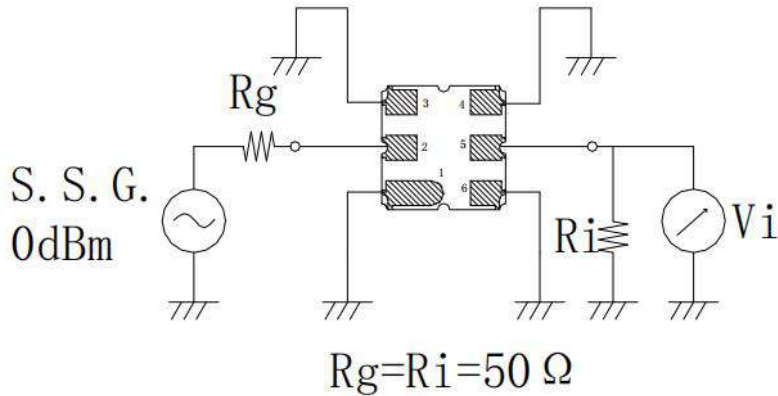
Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		1842.50		MHz
Insertion Loss(min)	IL		2.0	2.5	dB
Insertion Loss 1805.00 - 1880.00MHz	IL		2.3	4.0	dB
Amplitude Ripple (p-p) 1805.00 - 1880.00MHz	Δa		1.5	*3.0	dB
Group Delay Ripple 1805.00 - 1880.00MHz	GDR		15.0	50.0	ns
Absolute Attenuation	a				
DC - 1500.00MHz		22.0	25.0		dB
1500.00- 1710.00MHz		23.0	25.0		dB
1710.00- 1785.00MHz		15.0	30.0		dB
1795.00MHz		8.0*	10.0*		dB
1900.00MHz		13.0*	15.0*		dB
1915.00-2000.00MHz		25.0	30.0		dB
2000.00-3000.00MHz		25.0	30.0		B
VSWR 1805.00 - 1880.00MHz			1.9:1	2.2:1	/

Package & Dimensions



Pin No.	Description
2	Input
5	Output
1,3,4,6	Ground

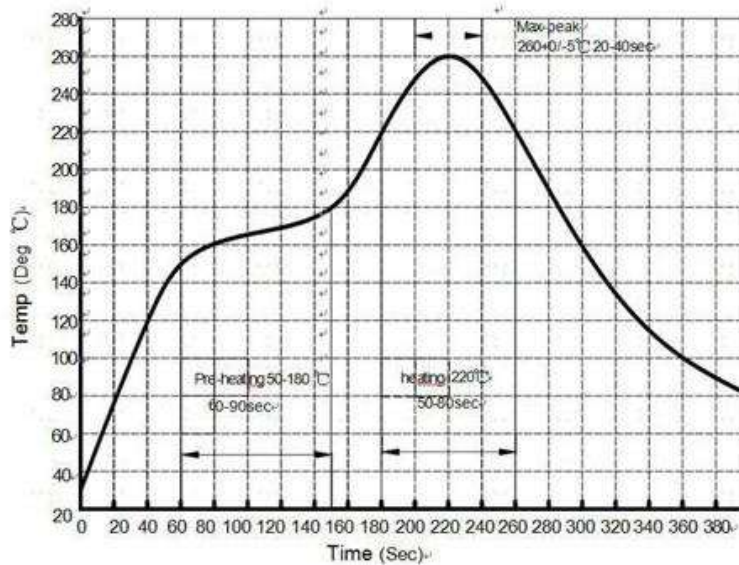
Test circuit



Maximum Ratings

Item		Value	Unit
DC Voltage	VDC	5	V
Operation Temperature	T	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	°C
RF Power Dissipation	P	20	dBm

Recommended SMT Solder Profile



Ordering Information

Part Number	Number of Devices	Container
SPT1842M3030A	1000pcs	Tape and Reel

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